CLAIMS

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- 1. A method of using a computer for transferring data, comprising:
- 2 sending a request for data to a targeted computer system;
- determining if the data is in a look-up list that references other computers having the
- 4 requested data;
- sending the request to the other computers having the requested data;
- 6 encoding the data using an acknowledgement independent equalized data packet
- 7 encoding scheme;
- 8 sending the encoded data to a requesting user;
- 9 receiving the encoded data from sending computers;
- decoding the received encoded data;
- saving the decoded data in memory.
 - 1 2. The method of claim 1, wherein data transmission is accomplished over a
 - 2 peer-to-peer network.
 - 1 3. The method of claim 1, wherein encoded packets are relayed.
 - 1 4. The method of claim 1, wherein the look-up list is populated with nodes based
 - 2 on data transfer rates.
 - 1 5. The method of claim 1, wherein the look-up list is populated with nodes based
 - 2 on data types stored within the nodes.
 - 1 6. The method of claim 1, wherein the look-up list is a mesh list.

- The method of claim 1, wherein the acknowledgement independent equalized
- 2 data packet encoding scheme is a FEC encoding.
- 1 8. The method of claim 1, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 9. The method of claim 1, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.
- 1 10. A method of using a computer for transferring data, comprising:
- 2 receiving a request for data from a user;
- determining if the data is in a look-up list that references other
- 4 computers having the requested data;
- sending the request to the other computers having the requested data;
- 6 encoding the data using an acknowledgement independent equalized data packet
- 7 encoding scheme;
- 8 sending the encoded data to a requesting user.
- 1 11. The method of claim 10, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 12. The method of claim 10, wherein encoded packets are relayed.
- 1 13. The method of claim 10, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 14. The method of claim 10, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.

- 1 15. The method of claim 10, wherein the look-up list is a mesh list.
- 1 16. The method of claim 10, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 The method of claim 10, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 18. A method of using a computer for transferring data, comprising:
- 2 receiving a request for data from a user;
- gencoding the data using an acknowledgement independent equalized data packet
- 4 encoding scheme;
- sending the encoded data to the user.
- 1 19. The method of claim 18, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 20. The method of claim 18, wherein encoded packets are relayed.
- 1 21. The method of claim 18, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 22. The method of claim 18, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 23. The method of claim 18, wherein the look-up list is a mesh list.
- 1 24. The method of claim 18, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.

- The method of claim 18, wherein the data that is to be encoded is segmented before encoding.
- 1 26. A method of using a computer for dynamically transferring data, comprising:
- 2 sending a request for data to a targeted computer capable of servicing the request;
- 3 receiving acknowledgement independent equalized data packets from sending
- 4 computers;
- 5 decoding the received encoded data;
- 6 saving the decoded data in memory.
- 1 27. The method of claim 26, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 28. The method of claim 26, wherein encoded packets are relayed.
- 1 29. The method of claim 26, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 30. The method of claim 26, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 31. The method of claim 26, wherein the look-up list is a mesh list.
- 1 32. The method of claim 26, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 33. The method of claim 26, wherein the data that is to be encoded is segmented

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2 before encoding.

- 1 34. The method of claim 26, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.
- 1 35. A system for using a computer for transferring data, comprising:
- 2 means to send a request for data to a targeted computer system;
- means to determine if the data is in a look-up list that references other computers
- 4 having the requested data;
- 5 means to send the request to the other computers having the requested data;
- 6 means to encode the data using an acknowledgement independent equalized data
- 7 packet encoding scheme;
- 8 means to send the encoded data to a requesting user;
- 9 means to receive the encoded data from sending computers;
- means to decode the received encoded data;
- means to save the decoded data in memory.
 - 1 36. The system of claim 35, wherein data transmission is accomplished over a
 - 2 peer-to-peer network.
 - 1 37. The system of claim 35, wherein encoded packets are relayed.
 - 1 38. The system of claim 35, wherein the look-up list is populated with nodes
 - 2 based on data transfer rates.
 - 1 39. The system of claim 35, wherein the look-up list is populated with nodes

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- 2 based on data types stored within the nodes.
- 1 40. The system of claim 35, wherein the look-up list is a mesh list.

- 1 41. The system of claim 35, wherein the acknowledgement independent equalized
- 2 data packet encoding scheme is a FEC encoding.
- 1 42. The system of claim 35, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 43. The system of claim 35, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.
- 1 44. A system for using a computer for transferring data, comprising:
- 2 means to receive a request for data from a user;
- means to determine if the data is in a look-up list that references other computers
- 4 having the requested data;
- 5 means to send the request to the other computers having the requested data;
- 6 means to encode the data using an acknowledgement independent equalized data
- 7 packet encoding scheme;
- 8 means to send the encoded data to a requesting user.
- 1 45. The system of claim 44, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 46. The system of claim 44, wherein encoded packets are relayed.
- 1 47. The system of claim 44, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 48. The system of claim 44, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.

- 1 49. The system of claim 44, wherein the look-up list is a mesh list.
- 1 50. The system of claim 44, wherein the acknowledgement independent equalized
- 2 data packet encoding scheme is a FEC encoding.
- 1 51. The system of claim 44, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 52. A system for using a computer for transferring data, comprising:
- 2 means to receive a request for data from a user;
- means to encode the data using an acknowledgement independent equalized data
- 4 packet encoding scheme;
- 5 means to send the encoded data to the user.
- 1 53. The system of claim 52, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 54. The system of claim 52, wherein encoded packets are relayed.
- 1 55. The system of claim 52, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 56. The system of claim 52, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- The system of claim 52, wherein the look-up list is a mesh list.
- 1 58. The system of claim 52, wherein the acknowledgement independent equalized
- 2 data packet encoding scheme is a FEC encoding.

The system of claim 52, wherein the data that is to be encoded is segmented 59. 1 before encoding. 2 A system for using a computer for dynamically transferring data, comprising: 60. 1 means to send a request for data to a targeted computer capable of servicing the 2 3 request; means to receive acknowledgement independent equalized data packets from sending 4 5 computers; 6 means to decode the received encoded data; means to save the decoded data in memory. 7 The system of claim 60, wherein data transmission is accomplished over a 1 61. 2 peer-to-peer network. The system of claim 60, wherein encoded packets are relayed. 62. 1 The system of claim 60, wherein the look-up list is populated with nodes 63. 1 based on data transfer rates. 2 The system of claim 60, wherein the look-up list is populated with nodes 64. 1 based on data types stored within the nodes. 2 The system of claim 60, wherein the look-up list is a mesh list. 65. 1 The system of claim 60, wherein the acknowledgement independent equalized 66. 1 data packet encoding scheme is a FEC encoding. 2

The system of claim 60, wherein the data that is to be encoded is segmented

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before encoding.

- 1 68. The system of claim 60, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.
- 1 69. A program stored on a medium readable by a processor, the program,
- 2 comprising:
- a module to send a request for data to a targeted computer system;
- a module to determine if the data is in a look-up list that references other computers
- 5 having the requested data;
- a module to send the request to the other computers having the requested data;
- a module to encode the data using an acknowledgement independent equalized data
- 8 packet encoding scheme;
- 9 a module to send the encoded data to a requesting user;
- a module to receive the encoded data from sending computers;
- a module to decode the received encoded data;
- a module to save the decoded data in memory.
 - 1 70. The medium of claim 69, wherein data transmission is accomplished over a
 - 2 peer-to-peer network.
 - The medium of claim 69, wherein encoded packets are relayed.
 - The medium of claim 69, wherein the look-up list is populated with nodes
 - 2 based on data transfer rates.
 - The medium of claim 69, wherein the look-up list is populated with nodes
 - 2 based on data types stored within the nodes.

- The medium of claim 69, wherein the look-up list is a mesh list.
- The medium of claim 69, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- The medium of claim 69, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 77. The medium of claim 69, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.
- 1 78. A program stored on a medium readable by a processor, the program,
- 2 comprising:
- a module to receive a request for data from a user;
- a module to determine if the data is in a look-up list that references other computers
- 5 having the requested data;
- a module to send the request to the other computers having the requested data;
- a module to encode the data using an acknowledgement independent equalized data
- 8 packet encoding scheme;
- 9 a module to send the encoded data to a requesting user.
- The medium of claim 78, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 80. The medium of claim 78, wherein encoded packets are relayed.
- 1 81. The medium of claim 78, wherein the look-up list is populated with nodes

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2 based on data transfer rates.

- 1 82. The medium of claim 78, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 83. The medium of claim 78, wherein the look-up list is a mesh list.
- 1 84. The medium of claim 78, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 85. The medium of claim 78, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 86. A program stored on a medium readable by a processor, the program,
- 2 comprising:
- a module to receive a request for data from a user;
- a module to encode the data using an acknowledgement independent equalized data
- 5 packet encoding scheme;
- a module to send the encoded data to the user.
- 1 87. The medium of claim 86, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 88. The medium of claim 86, wherein encoded packets are relayed.
- 1 89. The medium of claim 86, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 90. The medium of claim 86, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 91. The medium of claim 86, wherein the look-up list is a mesh list.

- 1 92. The medium of claim 86, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 93. The medium of claim 86, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 94. A program stored on a medium readable by a processor, the program,
- 2 comprising:
- a module to send a request for data to a targeted computer capable of servicing the
- 4 request;
- a module to receive acknowledgement independent equalized data packets from
- 6 sending computers;
- 7 a module to decode the received encoded data;
- a module to save the decoded data in memory.
- 1 95. The module of claim 94, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 96. The module of claim 94, wherein encoded packets are relayed.
- 1 97. The module of claim 94, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 98. The module of claim 94, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 99. The module of claim 94, wherein the look-up list is a mesh list.

- 1 100. The module of claim 94, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 101. The module of claim 94, wherein the data that is to be encoded is segmented
- 2 before encoding.
- 1 102. The module of claim 94, wherein the received encoded packets are decoded,
- 2 and then re-encoded for further transmission upon request.

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1	103. A network transmission apparatus, comprising:				
2	a processor;				
3	a memory, communicatively connected to the processor;				
4	a program, stored in the memory, including,				
5	a module to send a request for data to a targeted computer system;				
6	a module to determine if the data is in a look-up list that references other				
7 computers having the requested data;					
8	a module to send the request to the other computers having the requested data;				
9	a module to encode the data using an acknowledgement independent				
10 equalized data packet encoding scheme;					
11	a module to send the encoded data to a requesting user;				
12	a module to receive the encoded data from sending computers;				
13	a module to decode the received encoded data;				
14	a module to save the decoded data in memory.				
1	104. The apparatus of claim 103, wherein data transmission is accomplished over				
2	peer-to-peer network.				
1	105. The apparatus of claim 103, wherein encoded packets are relayed.				
1	106. The apparatus of claim 103, wherein the look-up list is populated with nodes				
2	2 based on data transfer rates.				
1	107. The apparatus of claim 103, wherein the look-up list is populated with nodes				
2	based on data types stored within the nodes.				

- 1 108. The apparatus of claim 103, wherein the look-up list is a mesh list.
- 1 109. The apparatus of claim 103, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 110. The apparatus of claim 103, wherein the data that is to be encoded is
- 2 segmented before encoding.
- 1 111. The apparatus of claim 103, wherein the received encoded packets are
- 2 decoded, and then re-encoded for further transmission upon request.
- 1 112. A network transmission apparatus, comprising:
- 2 a processor;
- a memory, communicatively connected to the processor;
- 4 a program, stored in the memory, including,
- 5 a module to receive a request for data from a user;
- a module to determine if the data is in a look-up list that references other
- 7 computers having the requested data;
- 8 a module to send the request to the other computers having the requested data;
- a module to encode the data using an acknowledgement independent
- 10 equalized data packet encoding scheme;
- a module to send the encoded data to a requesting user.
- 1 113. The apparatus of claim 112, wherein data transmission is accomplished over a
- 2 peer-to-peer network.
- 1 114. The apparatus of claim 112, wherein encoded packets are relayed.

- EXPRESS MAIL LABEL NO.: EF098977416US PATENT APPLICATION 1 115. The apparatus of claim 112, wherein the look-up list is populated with nodes 2 based on data transfer rates. 1 The apparatus of claim 112, wherein the look-up list is populated with nodes 116. 2 based on data types stored within the nodes. 1 117. The apparatus of claim 112, wherein the look-up list is a mesh list. 1 118. The apparatus of claim 112, wherein the acknowledgement independent 2 equalized data packet encoding scheme is a FEC encoding. 1 119. The apparatus of claim 112, wherein the data that is to be encoded is 2 segmented before encoding. A network transmission apparatus, comprising: 1 120.
- 2 a processor;
- a memory, communicatively connected to the processor; 3
- a program, stored in the memory, including, 4
- a module to receive a request for data from a user; 5
- a module to encode the data using an acknowledgement independent 6
- equalized data packet encoding scheme; 7
- a module to send the encoded data to the user. 8
- The apparatus of claim 120, wherein data transmission is accomplished over a 1 121. 2 peer-to-peer network.
- The apparatus of claim 120, wherein encoded packets are relayed. 122. 1

- 1 123. The apparatus of claim 120, wherein the look-up list is populated with nodes 2 based on data transfer rates.
- 1 124. The apparatus of claim 120, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 125. The apparatus of claim 120, wherein the look-up list is a mesh list.
- 1 126. The apparatus of claim 120, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 127. The apparatus of claim 120, wherein the data that is to be encoded is
- 2 segmented before encoding.
- 1 128. A network transmission apparatus, comprising:
- 2 a processor;
- a memory, communicatively connected to the processor;
- 4 a program, stored in the memory, including,
- 5 a module to send a request for data to a targeted computer capable of servicing
- 6 the request;
- 7 a module to receive acknowledgement independent equalized data packets
- 8 from sending computers;
- 9 a module to decode the received encoded data;
- a module to save the decoded data in memory.
- 1 129. The apparatus of claim 128, wherein data transmission is accomplished over a
- 2 peer-to-peer network.

- 1 130. The apparatus of claim 128, wherein encoded packets are relayed.
- 1 131. The apparatus of claim 128, wherein the look-up list is populated with nodes
- 2 based on data transfer rates.
- 1 132. The apparatus of claim 128, wherein the look-up list is populated with nodes
- 2 based on data types stored within the nodes.
- 1 133. The apparatus of claim 128, wherein the look-up list is a mesh list.
- 1 134. The apparatus of claim 128, wherein the acknowledgement independent
- 2 equalized data packet encoding scheme is a FEC encoding.
- 1 135. The apparatus of claim 128, wherein the data that is to be encoded is
- 2 segmented before encoding.
- 1 136. The apparatus of claim 128, wherein the received encoded packets are
- 2 decoded, and then re-encoded for further transmission upon request.